

REMARKS

I. Summary of the Office Action and this Reply

Claims 1-36 are pending. Claims 1-9, 14-15, and 33-36 stand rejected under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 6,115,741 to Domenikos et al. ("Domenikos"). Claims 10 and 22 stand rejected under 35 U.S.C. § 102(e) as anticipated by U.S. Patent No. 6,230,196 to Guenthner et al. ("Guenthner '196"). Claims 16-19 stand rejected under 102(e) as anticipated by U.S. Patent No. 6,134,588 to Guenthner et al. ("Guenthner '588"). Claims 11-13 and 23-32 stand rejected under 35 U.S.C. § 103(a), as obvious over Guenthner '196 in view of Domenikos. Claims 20-21 stand rejected under 103(a) over Guenthner '196.

Claims 1-9 stand rejected under 35 U.S.C. § 112. Claims 1 and 7 are amended herein to address the rejection.

II. Examiner Interview

The Examiner is thanked for the telephone interview conducted on January 22, 2004. In light of the interview, certain of the claims are amended herein for clarity.

III. Discussion of the Present Invention and Cited References

The Present Invention

The present invention is directed to a computer implemented method and apparatus for retrieving files in a network using certain placeholders/identifiers that are distinct from conventional URLs/electronic addresses/physical references; those

placeholders/identifiers are referred to herein as "logical references." A traditional electronic address/URL is a "physical reference," in that it provides information required for identifying, locating, retrieving and/or transmitting a desired file, e.g., by identifying a file's location on a server identified in the electronic address. In contrast, a logical reference in accordance with the present invention does not in and of itself provide sufficient information for identifying, locating, retrieving and/or transmitting a desired file. Rather, such a logical reference is simply a placeholder that can be matched with a conventional electronic address of a file.

The logical references appear in a source file that is interpretable by a browser to display a web page, etc. Accordingly, a hyperlink displayed by a browser is directly associated with a logical reference in the source file. This is in contrast to the conventional arrangement in which a hyperlink displayed by a browser is directly associated with a physical reference/URL/electronic address in the source file.

Accordingly, a traditional HTML/web page/source (parent) file contains text/code interpretable by a Web browser, etc. for displaying the interpretation of that parent file to a user, e.g. as a Web page. The user typically does not view the contents of the parent file; instead the user views the browser's interpretation of the parent file, e.g. as a Web page. A traditional electronic address, e.g., URL, is a "physical reference" providing information required for identifying, locating, retrieving and/or transmitting a desired file. This address contained in the parent file is not displayed to a user; instead, the browser displays to the user a corresponding hyperlink, which may be textual, an icon, an image, etc.

Accordingly, the hyperlink displayed by the browser is associated with the electronic address in the parent file. No matter the form of the hyperlink displayed by the browser, the hyperlink is a point of access directly associated with a physical reference (URL/electronic address) in the parent file. This is plainly apparent when one looks at the parent file, e.g., an HTML source file, as opposed to the web page displayed by a browser as an interpretation of the source file. For example, the following text may appear in a parent/source file:

Click Here.

Accordingly, the text "Click Here" will appear as a hyperlink in a browser, and that hyperlink will be associated with the URL (physical reference)

http://www.xyz.com/home/index.html. This URL indicates that the index.html file is located in the directory named "home" on the server identified by the hostname xyz.com.

In contrast, the present invention employs a logical reference that does not in and of itself provide sufficient information for identifying, locating, retrieving and/or transmitting a desired file. Such a logical reference is simply a placeholder that can be matched with a conventional electronic address of a file. The logical reference appears in the parent file and therefore is analogous to a URL/electronic address as discussed above in that it may be directly associated with a hyperlink displayed via a browser. A corresponding hyperlink displayed by a browser is directly associated with the logical reference and therefore serves as a logical point of access to a file.

See specification, page 7, lines 7-13; page 10, line 23 - page 11, line 2.

Accordingly, in the present invention, the user may select hyperlinks using a Web

browser, as generally known in the art, but those hyperlinks are directly associated with a logical reference, which is apparent from viewing the parent/source file. For example, a hyperlink displayed by a browser may be associated with the logical reference appearing in a parent/source file. The logical reference is resolved to a conventional physical reference/URL/electronic address by a server selection program for retrieval of an associated file when the corresponding hyperlink is selected. See example discussed in the application at page 11, line 8 - page 13, line 10.

This association of a logical reference in a parent file with a hyperlink provides an indirect relationship between a hyperlink and a physical reference. This allows the list of physical references corresponding to the logical reference to be updated (which may be maintained outside of the parent file), without the need to update the parent file itself (which can contain a single logical reference that can later be matched with a current list of physical references). Accordingly, outdated address information and broken links can be eliminated.

U.S. Patent No. 6,115,741 to Domenikos et al.

Domenikos discloses a system/method that allows a website administrator to provide remote clients with access to application programs stored on a web server. See column 9, lines 22-25. An application information file is generated that contains information necessary for running the remote application on the client. Column 9, line 61 - column 10, line 12. When a client requests execution of an application program, the system generates an array of file pointers 60 at the server (see Figure

4) and an array of remote file pointers 24 at the client 12 (see Figure 4). Column 14, lines 1-9. The array of file pointers 60 represents the locations of the disk 46 at the server 14 that contain the executable code. Column 15, lines 58-60; Figure 4. A connection element 20 at the client 12 opens a file having a copy of the file pointers 60 and generates the array of remote file pointers 24. Each remote file pointer 24 is a handle to a physical location on the disk 46 on the server 14 that can be employed by the client 12 as an access point to the physical location of the disk 46 that contains the executable code for the application program. Column 15, line 66 - column 16, line 6; column 16, lines 8-20.

U.S. Patent No. 6,134,588 to Guenthner et al.

Guenthner '588 discloses a method of network communication for providing high availability web browser access to servers. Guenthner discloses that when a browser issues an IP request to a name server such as a domain name service (DNS), the hostname portion of a conventional URL is matched to a list of one or more IP addresses that are returned to the web client upon an http request, as well known in the art. Each IP address identifies a server that hosts the content that the user of the web client has requested. Guenthner asserts that, in the prior art, the list included only one address and most browser products used or expected to use only one such address. According to Guenthner, a list of one or more IP addresses received from a domain name server during resolution of a conventional physical electronic address (e.g. URL) is used to build a hostname address list (HAL) that is

Reply to final Office Action dated October 28, 2003

then used to control how the particular IP addresses therein are managed by the browser. Column 4, lines 30-50.

Upon a given web browser event, such as activation of a link displayed in a web page, a routine gets the hostname from a conventional electronic address/URL. See steps 70 and 72, Figure 5; column 6, lines 8-17. Accordingly, when a DNS name server returns a list of current IP addresses for a given host name and/or URL, the list is used to identify a set of servers, rather than one, that may be used to satisfy the user's request. Column 8, lines 18-24. Thus, when the user at a client machine activates a link to a URL, the browser at the client machine receives a list of IP addresses from the DNS name server that may be associated with servers servicing that URL. Column 8, lines 34-37.

Files are then requested from one or more IP addresses in the HAL.

U.S. Patent No. 6,230,196 to Guenther et al.

Guenther '196 discloses a method for dynamically creating a Web page at a Web server in response to an HTTP request from a Web client. The requested Web page is intended to present a hyperlink for allowing a user to access a certain linked page/file. That linked page/file may be found on various servers, and therefore may be retrieved using one of several different electronic addresses. In response to the HTTP request for the requested Web page, a server selects a given one of the distinct servers based on given criteria. The single, selected electronic address for the linked page/file is then inserted into the source file of the requested Web page before the Web page/source file is transmitted to the requesting client. The

Reply to final Office Action dated October 28, 2003

requested Web page, including the inserted electronic address, is then returned to the client in response to the request. Thus, if the hyperlink is later activated by the user browsing the returned Web page, the linked page is served from the selected other server using the single inserted electronic address. Col. 2, lines 9-23.

III. Response to 102 Rejections

A rejection under 35 U.S.C. § 102 is proper only if each and every element of the claim is found in a single prior art reference. MPEP § 2131.

Claims 1-9, 14-15, 33 and 36

The Examiner has rejected independent claims 1, 14, 33 and 36 under 35 U.S.C. § 102(e) as anticipated by Domenikos.

Contrary to the Examiner's assertions in paragraph 5 of the Action, Domenikos provides no disclosure whatsoever of a logical reference contained in a parent file that uniquely identifies a file independently of an electronic address at which the (source file) file is located, as recited in amended claims 1 and claim 14. A logical reference appears in a parent file; an associated hyperlink appears in a browser as a result of interpretation of the parent file. The hyperlink itself does not appear in the parent file. The logical reference does not appear in the browser. A hyperlink cannot be considered to be the claimed logical reference. The specification makes clear that the logical reference appears in a parent/source file, and a corresponding hyperlink is displayed by a browser. The conventional hyperlink of Domenikos is directly associated with a physical reference/URL in a

parent file, and is not associated with a logical reference in the parent file. Col. 14, lines 30 - 35.

Claims 33 and 36 have a recitation similar to that of claim 1, expressly reciting that the logical reference of the parent file identifies the desired file independently of a URL. A logical reference is not analogous to a URL or other electronic address used by Domenikos, or any browser-displayable hyperlink disclosed by Domenikos. The hyperlink is not a logical reference, or analogous to a logical reference, because the hyperlink appears in the browser, not in the parent file. Additionally, any file pointers in Domenikos that are associated with the hyperlink are physical references, not logical references. Domenikos clearly indicates that these file pointers are not logical references. See discussion of Domenikos above. Domenikos, col. 15, lines 57-60; col 16, lines 1-6.

For at least these reasons, reconsideration and withdrawal of the rejection of claims 1-9, 14-15, and 33-36 are respectfully requested.

Claims 10 and 22

Claim 10 relates to a method involving receiving, at a server, a request for transfer to a client of a parent file containing a logical reference that uniquely identifies a desired file independently of an electronic address at which the desired file is located. This is neither taught nor suggested by Guenther '196.

Claim 22 relates to a server computer storing a program for transmitting, responsive to a request therefor, a parent file containing a logical reference uniquely identifying a desired file independently of an electronic address at which the desired

file is located, the program being capable of modifying the parent file by inserting a list of electronic addresses corresponding to the logical reference contained in the parent file before transmitting the parent file to the client. This is neither taught nor suggested by Guenthner '196.

As discussed above, Guenthner '196 involves dynamically creating a web page to include a single physical reference (for a certain desired/linked file) before transmitting a requested file to a client. However, Guenthner does not disclose such a logical reference, or that any source/parent file includes both a logical reference and a one or more corresponding physical references/URLs/electronic addresss for a single desired/linked file.

For at least these reasons, reconsideration and withdrawal of the rejection of claims 10 and 22 are respectfully requested.

Claims 16-19

The Examiner has rejected independent claim 16 under 102(e) as anticipated by Guenthner '588.

Claims 16-19 recite a client computer storing a parent file containing a logical reference uniquely identifying a desired file independently of an electronic address at which the desired file is located, and a list of physical references, stored in the memory, listing at least one electronic address for each logical reference in the parent file.

Guenthner '588 discloses a system whereby when the user at a client machine activates a link to a URL, the browser at the client machine receives a list

Reply to final Office Action dated October 28, 2003

of IP addresses from the DNS name server that may be associated with servers servicing that URL. See discussion above of Guenther '588; Guenther, col. 8, lines 34-37. However, this listing of both logical references/placeholders and electronic addresses in a single parent file is neither taught nor suggested by Guenther '588.

For at least these reasons, reconsideration and withdrawal of the rejection of claims 16-19 are respectfully requested.

IV. Response to 103 Rejections

The Examiner has rejected claims 11-13, 20-21 and 23-32 under 103(a) as obvious in view of Guenther '196 and/or Domenikos. These dependent claims are believed patentable for at least the reasons set forth above.

CONCLUSION

In view of the foregoing amendments and remarks, Applicants believe claims 1-36 to be patentable and the application in condition for allowance. Applicants respectfully request issuance of a Notice of Allowance. If any issues remain, the

Application No. 09/328,657

Docket No. Breitbart 3-1

Reply to final Office Action dated October 28, 2003

undersigned request a telephone interview prior to the issuance of an action.

Respectfully submitted,

Date: January 28, 2004



Gregory S. Bernabeo
Reg. No. 44,032

Synnestvedt & Lechner LLP
2600 Aramark Tower
1101 Market Street
Philadelphia, PA 19107
Telephone: 215-923-4466
Facsimile: 215-923-2189